

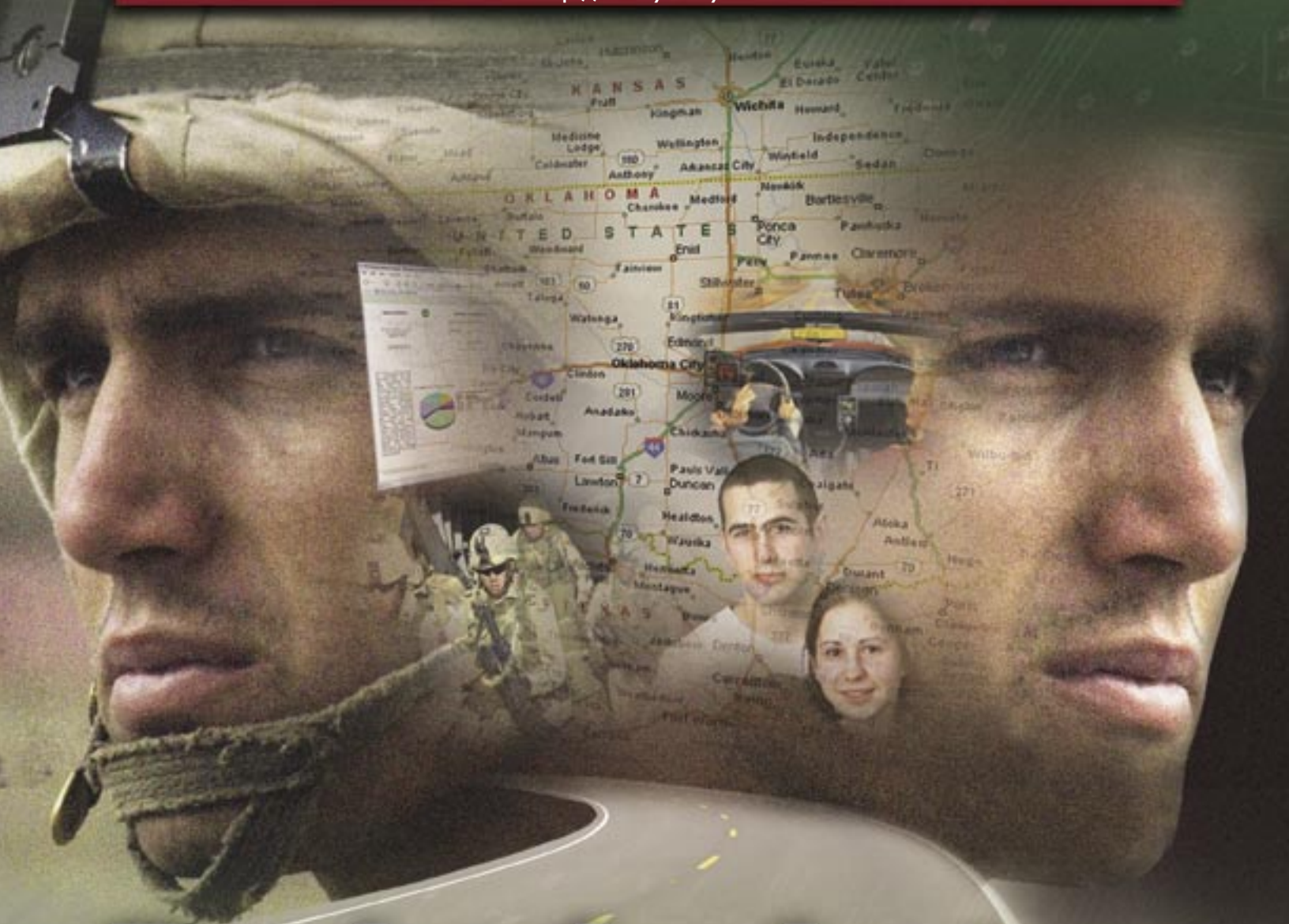
COUNTERMEASURE

ARMY GROUND RISK-MANAGEMENT INFORMATION

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Redeploying Home

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ASMIS: Enhancing Safety Through Applied Knowledge

The end of the fiscal year brought some sobering safety statistics for the Army— 261 Soldiers died last year in Army air, ground, and POV mishaps. That number is up 29 percent (59 more Soldiers) from 2002, and up 55 percent (93 more Soldiers) from 2001.

We are going in the wrong direction and getting there fast.

From my experience in Afghanistan and Iraq, I know commanders are doing everything in their power to mitigate mission hazards. There is no doubt the Global War on Terrorism has heightened our Soldiers' exposure to risk. However, as I study our year-end fatality statistics, one thing hits me in the face. Our Soldiers are rarely dying while conducting complex missions or training exercises. As in each of the last 10 years, our Soldiers are dying while doing their most basic, everyday activity: driving their privately owned vehicles (POVs). If we could have eliminated POV fatalities, we would have saved 313 Soldier's, lives during the past 3 years—109 in FY03 alone.

At the Safety Center we are committed to giving you the tools to risk mitigate, both on and off duty. Specifically, we are going to use technology to inspire a greater level of communication between our Soldiers and first-line leadership. The POV module of the Army Safety Management Information System (ASMIS) is out in beta version and is accessible from the Army Knowledge Online (AKO) homepage. ASMIS is a centralized risk management tool that uses Army historical data to predict the risk level in a Soldier's travel plans. Furthermore, ASMIS suggests proven control measures for the supervisor to lessen their Soldiers' risks.

During the first week after ASMIS hit the AKO homepage, it had 2,400 registered users and produced over 5,000 travel plan assessments. The early feedback is that it is enlightening and useful. The Marines and Navy already have expressed interest in adopting it within their services. However, ASMIS is not a finished product. We have embedded tools such as Mapquest and The Weather Channel links within the assessments, and more tools are being developed to expand ASMIS into Europe and Korea. ASMIS is a beta version and will have shortcomings. We need you to use it and suggest improvements.

The ground module of ASMIS will be on the Web early this year. We look forward to providing our junior leaders with Army-level safety knowledge on ground operations. However, knowledge is power only when it is applied effectively. It is still up to the first-line leadership to make the difference by enforcing the established control measures. Your Soldiers won't always like it, but at the same time they are counting on you to do it. More importantly, your Soldiers' families have entrusted you to do it and ensure their loved ones arrive home safely. 🇺🇸

Keep your leader lights on!

BG Joseph A. Smith



GEN Schoomaker Sends

Protecting Our Combat Readiness

GEN PETER J. SCHOOMAKER
Chief of Staff, Army


We are an Army at war. The challenge of the Global War on Terrorism demands the highest level of leadership and soldier proficiency. We cannot be risk-averse; however, our Soldiers are our most valuable combat assets. Therefore, reducing preventable losses throughout our formations is fundamental to protecting our combat readiness.

Last year the Army experienced the highest accident rate in the last 10 years. The current trend, if not abated, will exceed last year's losses. Leaders must understand the impact of inexperience on their formations and where it will require education, training, direct leadership, and enforcement of standards to overcome. I hold myself and leaders at all levels accountable for meeting this challenge.

Since World War II over half of our combat losses were caused by accidents. Risk management integration has proven to be effective in reducing accidental losses. In Operation Iraqi Freedom (OIF) our accident rate has remained at 38 percent, a tribute to the performance of combat leaders' effective use of risk management. However, in order to win the Global War on Terrorism and protect the force, we must aggressively attack adverse trends in three key areas.

I expect senior leaders to focus aviation training on potential operational environments and aircrew coordination. Brownouts caused 75 percent of aviation Class A accidents in OIF. Aircrew coordination was a factor in half.

Almost half of ground combat losses occurred during rollovers. The primary cause was speed, aggravated by the failure to wear seatbelts. In addition, far too many of our Soldiers have been killed in theater by negligent discharges. I challenge our noncommissioned officer corps to train Soldiers to standard, enforce those standards, and supervise.

During the last 10 years, over half of our accidental fatalities happened in POVs. This year is no exception. Our programs are not effective. In order to make an impact we must change our culture. Risk management is a 24-hour leader responsibility, and Soldiers must be held accountable for their actions. I have provided you with tools, accessible through the Army Knowledge Online Web site, to drive our culture change and reduce risk. We will win the Global War on Terrorism, but we must not accept any unnecessary risks that place our Soldiers in jeopardy. 

**Adapted from CSA's message dated
11 December 2003**



Declaring the War on Accidents

BOB VAN ELSBERG
Managing Editor

Life may be unfair but death isn't—a fatal accident is an “equal-opportunity” killer. It doesn't care whether you're behind the wheel of a HMMWV or a Honda; it will take you wherever it can.

I know. I have seen death many times during my 33 years in and around the military. Back in 1974 I waved goodbye on a Friday afternoon to a couple of friends as they left to go canoeing in Washington state. Within 24 hours they were both dead—victims of alcohol and the “I-am-bulletproof” syndrome that led both of them to shun life jackets.

The year before, I saw a pretty young woman dying on the road next to her car. There was nothing I could do to help her. There's an old saying that goes, “Die young and leave a handsome corpse.” As I looked through a bus window at the accident, there was nothing attractive about watching her turn blue in death.

Early in 2002 I interviewed the widow of an Air Force sergeant who'd gotten on the road drunk and hit a concrete barrier at 79 mph. Unbelted, he'd gone into the windshield and was declared brain dead the following day. He had a lot of bravado in his attitude about life. As I interviewed his widow, I sat there helplessly as she broke down in tears. They'd gotten married and bought a house barely 2 months before he died. When he ignored years of

warnings against drinking and driving, he never thought about what it would do to the person who loved him most.

The problem with accidental death is that there's no 20-20 hindsight for those involved. There's no going back and doing things differently because of lessons learned. There is only one destination—and death gives no paroles.

That's why declaring war on accidents is important, even as we fight this War on Terrorism. It hurts just as much to bury a loved one who died in an accident as one who died on the battlefield. Maybe, in reality, it hurts more. Death in combat is at least for a purpose. Death from an accident does little except to provide a sad example.

Boston, Baltimore, Baghdad—it doesn't matter where you are, you're on the front lines of this war. Your best piece of protective “armor” is risk management. Taking the time to identify risks, assess their severity, develop a plan to protect yourself, and then follow that plan can make you a victor in this war. Ignoring the risks and hoping in luck to get you through can quickly make you a victim.

Victor or victim—it's your choice. 🐻

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Redeploying Home

Units plan and prepare extensively for the return of their personnel and equipment to home station. However, leaders must also prepare their Soldiers for the dangers they will face after they've returned.



LTC CHARLIE CLAYTON
CJTF 180, Afghanistan


Most of our ground forces can expect to be deployed to Iraq or Afghanistan at some time in the future. Leaders are responsible for protecting their soldiers in those unfamiliar environments. However, that responsibility doesn't end when those soldiers leave the theater—it also extends to when they go on leave or pass after redeploying home.

In the old days, a Soldier returning from a remote tour of duty could expect a safety briefing that consisted of “don't drink and drive” and “use a condom.” But such a warning is insufficient today. Soldiers returning home from an extended combat zone deployment will go on leave or pass and do as Soldiers have always done: have fun, deflate, and get wild. Leaders need to give their Soldiers every opportunity to return alive, healthy, and fit for duty. To do that, Soldiers must be set up for success, not failure.

Commanders at every level should take time to review plans for passes and leave and ask themselves, “What are the safety concerns?” In fact, there are several.

Statistics show motor vehicle accidents continue to take a disproportionate number of our Soldiers' lives each year. A significant factor in these accidents is fatigue. Soldiers have been taught to plan for convoy operations, including scheduled rest and meal breaks. Why not require Soldiers to do the same thing when planning their leave or pass? Internet road map tools allow Soldiers to plan their travel in far more detail than ever before. They can even arrange for meals and lodging before their departure. Squad leaders and first-line supervisors, while unable to oversee their personnel on leave or pass, should still review their Soldiers' travel plans.

The most dangerous phase of leave or pass is the return trip because Soldiers often wait until the last minute to head back. (See the related story, “Been There, Done That...Lucky to be Alive!” on pages 10-11.) Leaves normally begin and end at midnight, which allows a Soldier time to sleep before first formation the next day. The exception



“Statistics show motor vehicle accidents continue to take a disproportionate number of our Soldiers’ lives each year.”

to the midnight rule is when a Soldier works more than half the normally scheduled working hours on the date the leave begins or ends. In such cases, Army Regulation 600-8-10, *Leaves and Passes*, allows the commander to authorize either early departure or late arrival. However, passes can be more of a problem. Passes normally end at the beginning of working hours on the day the Soldier returns. That can tempt Soldiers to wait until the last minute to head back to their unit, perhaps driving all night—a tactic that has proven fatal for many Soldiers. Even if they don’t have an accident during that drive, they’re likely to show up for duty so tired they are a danger to themselves and others. To prevent that from happening, commanders need to establish a pass policy that ensures Soldiers return to their units in time to get plenty of sleep before first formation. NCOs can provide accountability by having their Soldiers call them when they return from pass.

Commanders realize their Soldiers are their unit’s most valuable asset. The accidental death of a Soldier is something for which a commander can never be fully prepared. However, by establishing a safety-oriented pass policy, commanders can help protect their Soldiers from fatigue-related accidents.

Route planning and scheduled rests to relieve fatigue and exhaustion are essential to a safe movement operation. Don’t allow your Soldiers’ return from deployment to be their last successful operation. Set them up for a successful leave or pass AND a safe return to post and duty.

Editor’s Note: In the article above, LTC Clayton touches on some important points concerning the value of using trip-planning technology available

on the Internet. Taking that technology one step further, the Army Safety Center recently developed a new POV risk assessment tool targeted specifically to Soldiers as part of the Army Safety Management Information System (ASMIS-1). ASMIS-1 uses Army historical accident data to predict the risk level of a specific travel plan and to suggest proven controls to reduce the risks, including links to Internet mapping and weather sites. The POV module is out in beta version and is accessible from the Army Knowledge Online (AKO) homepage (www.us.army.mil). All commanders and Soldiers are encouraged to register and use this valuable new tool.

LTC Clayton is the Safety Officer for Combined/Joint Task Force 180 in Afghanistan and is a member of the Army Safety Augmentee Detachment at U.S. Army Forces Command, Fort McPherson, GA. He may be contacted via e-mail at charlie.clayton@us.army.mil.



T*he Soldier of safety, the "roo" of risk management, the fleet-footed purveyor of precaution, Joey leaned forward until his nose touched the computer screen. There he saw a message from Korea.*

"I saw you on the back cover of November's *Countermeasure* and noticed you were wearing your helmet, which might be a bit painful for a kangaroo—long ears and all. But personal protective equipment (PPE) such as helmets and seatbelts is worth wearing, even when it seems annoying. Let me give you a case in point.

"We recently had an M998 rollover accident here in Korea. The driver and truck commander (TC) had been driving their HMMWV uphill on a dirt road. It was nighttime and they were wearing their night vision goggles. As they looked ahead, the blackout drive lights showed the road was washed out. Since they couldn't turn around, the TC decided to 'advance to the rear' and told the driver to back down the hill. Doing a little quick risk management—like sizing up the hazards, making a decision, and going with it—

the driver relinquished the steering wheel to the TC. He was licensed on the HMMWV and a more experienced driver. The driver climbed out and went to the bottom of the hill to ground-guide. Watching the driver, the TC began backing the HMMWV down the dirt road.

"This might have been a simple operation except—and it's the 'excepts' that always get you—this 'road less traveled' suddenly collapsed! Now, HMMWVs are known for their ability to traverse rough terrain. That assumes, of course, there is some terra firma beneath the tires! With none of that beneath the vehicle's passenger side, the HMMWV teetered at 45 degrees until gravity took a firm grip on the situation. The TC made a final (may we assume, 'excited?') radio call while the vehicle turned turtle. As the HMMWV came to rest, the radio aerial assumed the 'flattened' position beneath


the roof, somewhat limiting transmission range.

"Realizing he'd accomplished all he could behind the wheel, the TC released his seatbelt and scrambled out of the HMMWV to join the driver. The TC then pulled out his cell phone and called for help, which arrived in about 20 minutes.

"Now at first blush, this might sound like a bad-news story, but there is a silver lining to this cloud. The TC had taken the time to buckle his seatbelt and was wearing his Kevlar. You probably won't see a 'cammy-covered Kevlar' on the nugget of a NASCAR driver at the Daytona 500. But during a dark night in Korea, the Kevlar—and the HMMWV's seatbelts—did the trick. The TC walked away from the crash uninjured.

And the lesson learned? It is possible to 'pull victory from the jaws of defeat' if you use your PPE and risk management when driving a tactical vehicle."

(P.S. Wanna see the pictures of this accident? Turn to the back cover!)

Editor's Note: This Joey letter was inspired by an e-mail received from MAJ Kevin Hicks, 6-37 FA, Korea. Have you got a good news story to share, a question to ask, or an observation on how Soldiers can do things safer? Send Joey an e-mail at joey@safetycenter.army.mil and share your ideas in this magazine. 

I had just gotten back to Seattle from a 70-day patrol in Alaska and everyone was given 4 days off—5 if you could pay someone to stand your duty on the fifth day. I was anxious to see my girlfriend, who lived in San Diego, CA. I whipped out my road map and using the tried and true “string measuring system,” figured it would be a 1,250-mile drive. I calculated that I could make it in 24 hours. No big deal. I’d stood 24-hour duty before, so driving a car should be a snap.

I hit the road at 1 minute past midnight. To my credit, I covered about 900 miles before my energy level dropped through the floorboards. I pulled over for a brief rest and then drove the remaining 350 miles.

As you can imagine, having driven so far I wanted to cram as much as I could into those 3 days, so I cut corners on my sleep schedule. But hey, I was young and bulletproof. I could handle it.

Finally, I had to head back. I pulled out from my parents’ house at “zero-dark-early,” glad that I would at least miss the Los Angeles morning rush hour traffic. Except for gas I didn’t stop until I hit the northern California town of Dunsmuir, where I stopped for a bowl of chili. I figured that would keep me going for awhile longer.

It was nightfall and I was now well into Oregon. As I looked ahead, I thought I saw people walking across the freeway. I slammed onto the brakes and slowed to a crawl. But when I rubbed my eyes and looked around, nobody was there. “Wow,” I thought, “was that what is called ‘highway hypnosis’?”

I poured myself a cup of coffee from the thermos, determined not to fall prey to another illusion. An hour or so later I saw what I thought were the taillights of a tractor-trailer stopped in front of me. I hit the brakes and swerved into the left lane—but there was no tractor-trailer. The “taillights” were just some stars low on the horizon.

This was getting serious, so I took the next

exit and pulled off the road to get some sleep. I figured I could get in an hour-long nap and still make morning formation. I wasn’t asleep for long before a policeman shone his flashlight through the window and asked me what I was doing. Tired or not, I was going to have to get back on the road.

Once more I headed north on the highway. I rolled down the window, hoping the cold air would keep me awake. When that didn’t work I tried slapping my face and punching my right leg, figuring the pain would keep me awake. It wasn’t pretty, but at least my eyes were staying open.

The sun had been up for an hour or so when I passed the Seattle city limit sign. I breathed a sigh of relief. I’d made it, or so I thought. But I was wrong. Without any warning, I fell asleep going 55 mph on the freeway. Suddenly, I awoke to a blaring horn. I’d drifted to the right and was about to sideswipe a Corvette.

I swerved to the left, scared stiff at what had just happened. I realized I was no longer in control of myself—fatigue had taken over. I could fall asleep again at any moment, and I was only minutes away from my unit.


I was lucky—I made it back all right and shaved and dressed for formation. My E-6 took one look at me and ordered me to bed. He later told me I could have been brought up on charges for being unfit for duty, but this time he was going to give me a warning. I realized later that he cared enough to stop me from doing something stupid like this again. (Yes, NCOs, you CAN make a difference in your Soldiers’ off-duty safety.)

I was lucky three times on that trip—which was more luck than I deserved. I let being young and “bulletproof” almost make me dead. And dead is a lousy way to end a leave.

Lucky

Some tips to get you through the long haul:

- Get 7 to 8 hours of sleep before you leave. Long-distance driving is hard work. Also, don't begin your trip late in the day.
- Plan to drive with a friend. A passenger can help you with the driving, and conversation can increase alertness.
- Avoid long drives at night. The glare of lights, both from your dash and outside your vehicle, increases the danger of highway hypnosis.
- Don't use cruise control. Keep your body involved with driving.
- Stop for a rest break every 100 miles or 2 hours. Get out and walk around, or even jog or do some calisthenics. Exercise fights fatigue.
- Avoid alcohol and over-the-counter and prescribed medications that cause drowsiness.
- Caffeine can provide short-term alertness, but be aware it takes about a half hour for caffeine to take effect.
- If you can't stay awake, stop and get some sleep. Find a safe, guarded rest area, truck stop, or service station. Even a short nap—15 to 45 minutes—can help energize you enough to get to a hotel or motel.

(Note: The author describes how suddenly sleep can overcome the most vigilant driver. While caffeine and other stimulants are effective up to a point, eventually the sleep debt must be paid. Drivers must ensure they plan for and satisfy the body's requirement for sleep. Sleep is a creditor that will not be put off indefinitely!—LTC Joseph McKeon, U.S. Army Safety Center Surgeon.) 

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Been There, Done That...
to be Alive!

BOB VAN ELSBERG
Managing Editor

AS MIS

Clearing the Road



You're finally coming home from that long deployment in the "sandbox." Family and friends are anxiously awaiting your return, and you can't wait to get back home and celebrate. Once you return stateside, you begin thinking about the quickest way home. Should you fly, or maybe drive? After all, your car has been in storage all these months and these are *real roads*. Why not take the scenic route home and enjoy the view?

The thousands of Soldiers redeploying home in the first few months of this year will finally be away from the dangers of combat. However, these Soldiers might not think about the risks on American roadways. Privately owned vehicle (POV) accidents are the leading cause of accidental death in the Army: In Fiscal Year (FY) 2003 alone, 109 Soldiers died in POV accidents.

In response to this and other emerging trends, the U.S. Army Safety Center (USASC) has developed a tool to mitigate on- and off-duty risks. The Army Safety Management



And Ahead


JULIE SHELLEY
Staff Editor

Information System-1, or ASMIS-1, is an automated, centralized tool that features a question-and-answer session designed to assess the potential risks of a Soldier's planned activities. The system features three modules—POV, ground, and aviation. The POV module is currently available in a beta version, and the aviation module is scheduled to be released early this year.

The POV module is designed to be completed by all Soldiers on leave or pass (including those returning from deployment) for all planned trips outside the immediate local area. The tool helps the individual Soldier plan every aspect of the trip *before* departure. Questions about travel and factors such as the type of vehicle, seatbelt use, sleep, rest stops, and time of departure are asked in drop-down, multiple-choice fashion. When a Soldier completes the questionnaire, the system builds a profile based on the information collected and displays actual accident cases found in the USASC database that match the profile. The Soldier then gets to see real accidents involving other Soldiers just like them. From there, the Soldier is routed to a "Hazard Assessment" page, where a score of 1 (lowest risk) to 10 (highest risk) is assigned based on the Soldier's responses. Also featured on the page are a risk management matrix card and links to Mapquest and The Weather Channel. This assessment will then be forwarded to the Soldier's supervisor for his review, mitigation of risk, and approval.

A new feature in the POV module is a page that lists check-the-box controls in response to the personal and travel factors selected in the questionnaire. The information includes statistics on seatbelt use and drunk driving, along with other dangers such as fatigue. Here the Soldier can lower his or her risk by checking the appropriate control measures. The system then navigates the user to the final hazard assessment page, where the final score and risk level are figured based on combined responses from the questionnaire and controls pages. The Soldier should print the last page of the assessment to keep for personal use.

Soldiers and their supervisors should work hand-in-hand when using this system. When completed, the supervisor listed in the Soldier's profile will receive an e-mail listing the results of the assessment. It's important to note the results are confidential and non-retributational; ASMIS-1 was developed to help, not punish. The use of this tool by the Soldier and his supervisor allows for the exchange of information regarding the Soldier's travel plans and the associated risks. The hardest thing for young Soldiers to understand is that they don't know *that they don't know*. This tool will show Soldiers what has gone wrong for other Soldiers with similar travel plans and what the consequences were.

Begin the planning process by going to <https://safety.army.mil/asmis1>. First-time users should click the "Register" button and create an account. (Leaders have a separate login link just above the FY03 fatality chart.) Once login is complete, step-by-step directions will follow on every page. The entire process is complete in just a few easy steps and takes only a few minutes to finish. Take the extra time and try it out. You were victorious in Iraq. Now help us win the War on Accidents! 

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What's in

CW4 MICHAEL LICHOLAT
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In the spirit of accident prevention, sometimes we have to step up to the plate and take one for the team. Here's my humbling story, shared with a bit of humor.

There I was, 5 minutes away from delivering a briefing for a complicated air assault mission in support of Operation Enduring Freedom. I had only one chance to make a good first impression in front of our coalition brethren, so I was determined to put my best foot forward. I rehearsed the mission briefing twice and spent considerable effort ensuring the briefing area was set up to my exacting specifications. I aligned all the benches, marked and posted all the charts and maps, and placed the manual pointer within arm's reach in case the laser pointer failed. With my notes at hand and the backup butcher posters and imagery, I was confident I could ace this brief even if the Proxima projector failed.

The projector had been warming up for a few minutes when I noticed there was some dust on the lens. Well, I wasn't going to stand for having a few specks casting shadows on my briefing! So, I went to the supply locker that our company S-4 dutifully kept stocked with administration supplies and got a can of compressed air to shoo away the offending motes. We'd bought cases of the stuff before we deployed to blow the dirt and dust out of the cooling fans and circuit boards of our mission planning computers. We'd gone through our canned air like wildfire and were out of the "good stuff" we'd purchased back in the "Yoo Ess of Ay." However, our resourceful S-4 had replaced those with some canned air he'd bought in theater. I think it was from Italy, or somewhere else in Europe. Not

that Can O' Air?

being a multi-lingual man, I wasn't able to read the label.

I wasn't going to be bothered by that. I took the little plastic tube that came with the can and stuck it into the spray nozzle. I was thinking pleasant thoughts about how clear my presentation was going to be as I pointed the tube at the projector's lens. Those were my last pleasant thoughts.

I pushed down on the spray nozzle when suddenly there was a low-pitched boom. I was instantly engulfed in a ball of flame that one eyewitness conservatively estimated to be a good 6 feet in diameter. All the hair on my right arm was burned off, and the hair on my face was singed. Stunned, I dropped the can. The valve popped shut and the fire went out as quickly as it appeared.

After performing a quick assessment of my injuries, I left the briefing area for the tent where I slept, seeking a mirror so I could look for any additional damage. As I made my way out of the briefing tent amidst the arriving briefing attendants, the prominent comment was, "What is that smell?" At my tent, my worst fears were confirmed—my moustache was now much shorter (but in direct compliance with AR 670-1!), my eyelashes were almost gone, and my eyebrow hairs were all curled up. Luckily, I'm what you'd call a "folically challenged" individual, so I didn't have anything on top to worry about.


A quick time hack revealed less than 5 minutes until briefing kick-off. I quickly washed up, used a pair of scissors to trim the burnt ends off my moustache and eyebrows, and then returned to the podium with a couple of minutes to spare. Now I don't recommend this to anyone, but if you want to be calm when delivering a mission briefing, seek the feeling of euphoria that comes with no longer being a human torch. Usually the mission briefing is the least hazardous element of the mission and the execution phase is fraught with peril. Sadly, I had just proved otherwise!

So, how can you avoid having this happen

to you? Most, if not all, of the canned air sold in America is non-flammable and has warning labels to keep you from misusing the product. However, since we'd used up the "good stuff" we'd brought with us, the S-4—who is habitually browbeaten to keep the cupboards from becoming bare—replaced it with whatever was closest at hand. You know, the "You want canned air? I'll get you canned air!" approach. Unfortunately, the S-4 couldn't read the label either. That's something to bear in mind if you're buying commercial off-the-shelf (COTS) items in countries that lack the consumer protection guidelines we have in America.

In the end, the fault lay squarely on my shoulders. I took an aerosol can of unknown origin and sprayed it onto a projector containing a very hot light bulb, which provided a source of ignition. Furthermore, despite the fact that the can had a picture of a cat and a dog on it (I still don't know what *that's* all about), the back of the label had the word "Peligroso!" printed on it. I'm pretty sure that means danger.

In the end, I got lucky and avoided a serious burn by the hair of my chinny, chin ...uh oh ... those chin hairs are gone now. In the spirit of brotherhood, my comrades later hung a sign over my desk extolling my new nickname: "Flash! Do you mind if I smoke?"

Editor's Note: Can you help us out with the meaning of the word "peligroso" and what the picture of the cat and dog might mean? It would be interesting to find out just what was in the can. If you have the answer, please e-mail me at countermeasure@safetycenter.army.mil. I'll share your answer in the Mail Call column in Countermeasure. By the way, if you've had an interesting experience with a COTS item—especially one you bought overseas—please take a few minutes and send me an e-mail describing it. You might have the makings of a good article or an interesting note for the Mail Call column. 

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To Live or Die on the Range

SFC JOHN TEMPLE
Ground Accident Investigator
U.S. Army Safety Center

Will you be ready when the range goes 'hot'?

It was getting dark and the unit had completed its range fire and was preparing to go home. Their M2 HB (heavy barrel) .50 caliber machine guns needed to be brought off the firing line and loaded onto a vehicle. The officer in charge (OIC) told SGT Duvall (not his real name) to load the weapons into a HMMWV. SGT Duvall went to firing point one and, with assistance from SGT McReady (not his real name), loaded the first weapon. They continued down the firing line to firing point three, where they picked up that M2 and carried it to the HMMWV. There were other weapons in the HMMWV, so SGT Duvall told SGT McReady to lift the back of the M2 up so he could push from the muzzle end and slide it in. As SGT Duvall began sliding the M2 into the HMMWV, the machine gun's butterfly trigger caught the pintle of another weapon and caused the M2 to fire. SGT McReady heard the weapon fire, felt the blast, and jumped out of the way. When he turned around, he saw SGT Duvall lying on the ground with a gunshot wound to the chest.

That night a horrible accident took place, one that claimed the life of a Soldier. But it wasn't an isolated event. During FY03 we

lost 12 soldiers to range accidents—and that figure only represents the tip of the iceberg. The modern Army causation model states that for every major accident there are 59 minor incidents and 600 close calls. That means the problem is much larger than suggested by the number of fatalities.

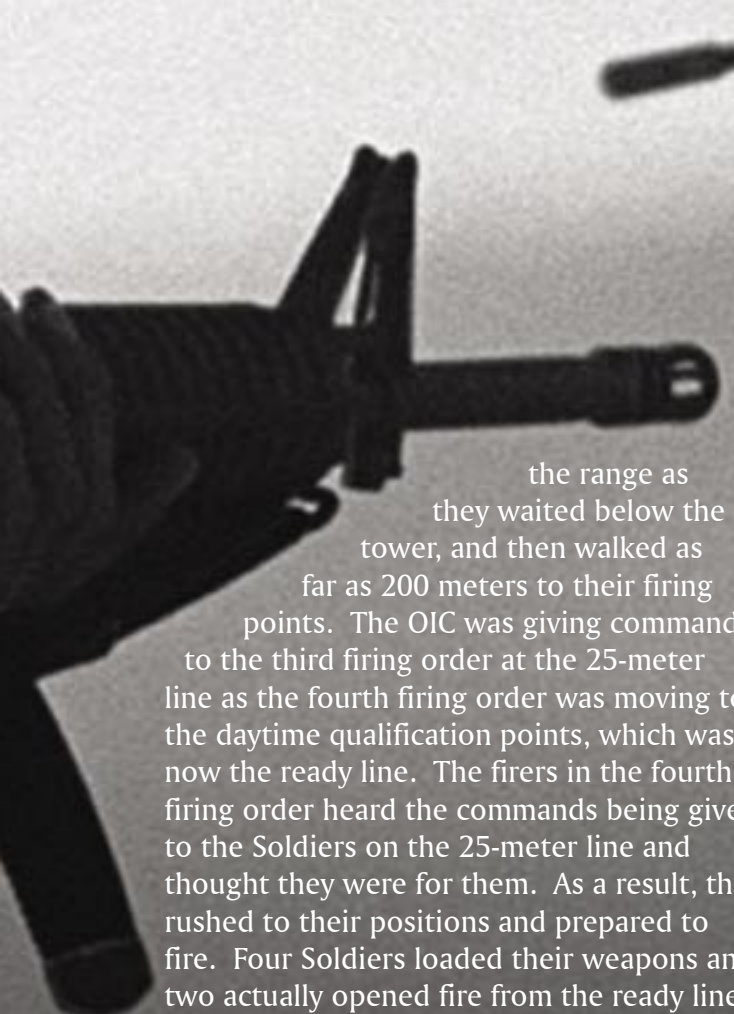
Again, this wasn't an example of an isolated problem. Here are some more examples of Army range accidents.

Confusion on the Range

A unit was conducting M16A2 qualification, including a night fire, for an upcoming Expert Infantry Badge (EIB) test when a Soldier was accidentally shot and killed.

The Soldier who fired from the zero firing line arrived on the range after the evening's safety brief had been given and, therefore, had not been briefed. The range OIC had changed the firing scenario after the first firing order, but didn't ensure all personnel were briefed on the new procedures.

Neither the OIC nor the range safety officer (RSO) had positive control over all the Soldiers on the range. The Soldiers were issued ammunition behind the tower, rodded onto



the range as they waited below the tower, and then walked as far as 200 meters to their firing points. The OIC was giving commands to the third firing order at the 25-meter line as the fourth firing order was moving to the daytime qualification points, which was now the ready line. The firers in the fourth firing order heard the commands being given to the Soldiers on the 25-meter line and thought they were for them. As a result, they rushed to their positions and prepared to fire. Four Soldiers loaded their weapons and two actually opened fire from the ready line. One of the Soldiers hit and killed another Soldier on the 25-meter line. As it turned out, the OIC and RSO were not certified in accordance with 1CD 350-1.

Not-So-Friendly Fire

It was a dark and bitterly cold night. The young paratrooper stepped from the line of departure (LD) and began to navigate the live-fire lane. A private first class was serving as the A team leader (a responsibility normally reserved for an NCO), and was motivated and aggressive. Little did he know that each step he took brought him one step closer to an accident. As the assault team attacked the objective, the young paratrooper accidentally shot the B-team leader.

How could this have happened? There were leadership changes within the squad before the operation. As a result, the young paratrooper oriented to the wrong sector, and there was some confusion among the safeties on the range. Fortunately, this time the Soldier survived the gunshot wound.

A Live Fire Gone Bad

A basic training unit was conducting a night infiltration course on a range when a drill sergeant was accidentally shot and killed.

The RSO was responsible for making sure all weapons were test fired and properly mounted before any of the basic trainees got onto the course. On this particular range, once a weapon was placed in the M142 mount it was not to be removed. However, when the M60 in the mount repeatedly malfunctioned, the Soldier operating it replaced it with another M60. The Soldier did not properly secure the weapon on the mount, nor was the M60 properly test fired before the training resumed. When the M60 was fired, the barrel depressed enough for a round to hit a drill sergeant as he walked on the range behind the crawling Soldiers.

Where There's Fire, There's Smoke

A unit was firing on an indoor range when sparks from their rounds hitting a metal bullet trap ignited a canvas sheet covering the trap's front. The fire quickly spread, igniting the soundproof material on the walls and ceiling. The Soldiers evacuated the building and, once outside, conducted a head count and found one Soldier was missing. The company commander donned a protective mask and entered the building. He found the Soldier lying on the floor unconscious. Despite attempts to save the Soldier's life, he died of smoke inhalation.

The dead Soldier had arrived at the range late and didn't receive a conduct of the range or safety briefing. When the fire started he was in the waiting area, unaware there was



"For every fatality there are a number of near misses."

an exit approximately 7 feet away. He was found in a hallway that led to the door he had used to enter the building. Investigators believe he was attempting to walk 150 feet to the only exit he knew of—the entrance he'd used to enter the building. Knowing the location of exits is one reason that everyone receives a conduct of the range and safety briefing.

Recurring Issues

When looked at, there were some common threads to these accidents. There are pieces of the problem that need to be understood so more Soldiers aren't needlessly killed. Let's look at the key common issues:

- Range safety officers and OICs not understanding their responsibilities as outlined in Army Regulation 385-63 and Department of the Army Pamphlet 385-63.
- Range safety officers being diverted away from their duties. Many times when a range accident is investigated we find the RSO was performing other duties, such as issuing ammunition or posting guards. In some cases, the RSO was not clearly identified. One of the RSO's jobs is to verify that all weapons are clear before leaving the firing line. When an RSO has not been identified, Soldiers have been known to leave the firing line with loaded weapons.
- Range and safety briefings not conducted prior to a Soldier firing. Every Soldier entering the range late needs to be identified and

given the full briefing before firing. The range briefing needs to address how the range will be run, starting from the time the Soldier enters the range until he or she exits.

- Range safety officers and lane safeties unfamiliar with the clearing procedures for the weapons being fired, or not in a position to ensure the range is running safely.
- Officers in charge being appointed the night prior to the range fire, thus limiting their preparation time.
- Ammunition being issued without control measures and accountability.
- Risk management not adequately conducted.

How Can We Prevent These Accidents?

Commanders need to establish a program to train RSOs and OICs on their duties and responsibilities. Range control does have a range certification. However, that shouldn't be confused with the responsibility commanders have to train and certify OICs and RSOs properly. Range control is focused on local policies and range procedures for the installation, not certifying RSOs and OICs on the weapon systems units will be firing.

Commanders need to identify RSOs and OICs early enough so proper preparation and coordination can be completed. Commanders also need to ensure risk management is conducted for every range they will be using.


Officers in charge need to have a plan for everything from the time they receive

the mission to run the range until they turn in the score cards. That includes doing a reconnaissance of the range and including the RSOs—normally experienced NCOs—in the planning.

Officers in charge should know where each person is on the range and what their weapon status is at all times. They also need to ensure the only Soldiers who have ammunition are the ones who are ready to fire. Each person who has a responsibility on the range needs to back-brief the OIC. Remember, the OIC is responsible for everything that happens on the range.

Range safety officers need to plan with OICs to ensure sure they are not diverted from their RSO duties. Those duties include ensuring all lane safeties are competent and qualified on

the weapon system being used, and verifying all weapons are clear before being removed from the firing line. Range safety officers must also ensure each Soldier is briefed on how the range will be run and provide Soldiers a thorough safety briefing. When Soldiers arrive late, RSOs are responsible for making sure those Soldiers get a proper safety briefing before going onto the range.

These are just a few steps you can take to ensure you have a safe and successful range fire. Range accidents are tragedies that can be prevented! 

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It's Not Clear Until I Say **"It's Clear!"**

SFC JOHN TEMPLE
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The range had been hot for 3 days. I was the master gunner on the range and I'd had very little sleep. We'd been running Bradleys downrange quickly and efficiently that night until 0430, when the crew of B31 reported a malfunction with their 25mm cannon. I instructed them to move to the clearing pit and clear the weapon.


Forty-five minutes had passed and B31 was still in the clearing pit. The next vehicle had completed firing and was ready to move to the clearing pit. I tried to get B31 on the radio but wasn't successful, so I called range safety and asked for a situation report. I was told the crew was still working on the problem. I still had two vehicles that needed to fire, so

I decided to go down and clear the weapon myself. I left the tower and took the walkway to the clearing pit. As I walked up to the Bradley, the Bradley commander and range safety officer (RSO) said the weapon was clear, but that they couldn't get it apart.

Without verifying the weapon was clear, I climbed onto the front of the vehicle to help remove the barrel. As I straddled the barrel, I heard a loud explosion. Talk about a concussion—it felt like a mule had kicked me in the butt and the back of the head! The weapon had fired and sent a 25mm round between my legs. I was lucky not to be hit!

That night I made several errors that could have cost me my life. I assumed the

weapon was clear because the RSO said it was. However, the fact the weapon was still together should have been a red flag, and I should've never walked to the front of the vehicle. However, I was tired and anxious to get the Bradleys firing again. That's no excuse, but it's something that happens all the time on ranges.

Lessons learned: Never take shortcuts on the range, even if you are running behind schedule. Never assume a weapon is clear just because someone tells you it is. Always take the time to make sure for yourself! 

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When the Leaders Weren't Looking

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After being deployed for several months away from home station, two young Soldiers volunteered to go to the National Training Center (NTC) to provide maintenance assistance during vehicle railhead operations while the rest of their unit returned to home station. The two Soldiers were accompanied by their team chief. After completing the mission at NTC, the team chief sent the two Soldiers back to their unit while he remained to tie up some loose ends.

The Soldiers arrived at their unit around 1600 and were scheduled to go on leave the following day. The unit was on a scheduled block leave and would deploy to NTC later that month. None of the Soldiers' leaders were present to greet them upon their return.


Once the Soldiers arrived at their barracks, they changed clothes and began drinking. After running out of beer a little before midnight, the two Soldiers drove to the nearby shoppette to buy more beer. After purchasing the beer, they drove back toward the barracks. The driver rapidly accelerated and within 1/3-mile was going between 60 and 70 mph. The driver entered a left-hand S-curve and lost control of the vehicle, which slid off the roadway and into a gravel area on the right side of the road. The vehicle spun 90 degrees counterclockwise and then stopped when the passenger side door struck a utility pole. The passenger suffered massive head and abdominal injuries, as well as a fractured femur. Unfortunately, his head injuries were fatal. The driver suffered multiple facial fractures and a severe head injury. It is unknown at the time of this writing if the driver will recover fully. This tragic accident took the life of one very young Soldier and will scar the other for the rest of his life.

While it is true that every Soldier has a personal responsibility to stay safe, leaders must be proactive and intervene if they are going to reduce the number of POV accidents plaguing our Army today. Leaders can't just give the standard "buckle-up" and "don't drink and drive" safety briefings. Yes, these are important and leaders need to continue providing these messages to Soldiers. However, keeping Soldiers safe in their POVs requires something more—leaders taking positive control of their Soldiers.

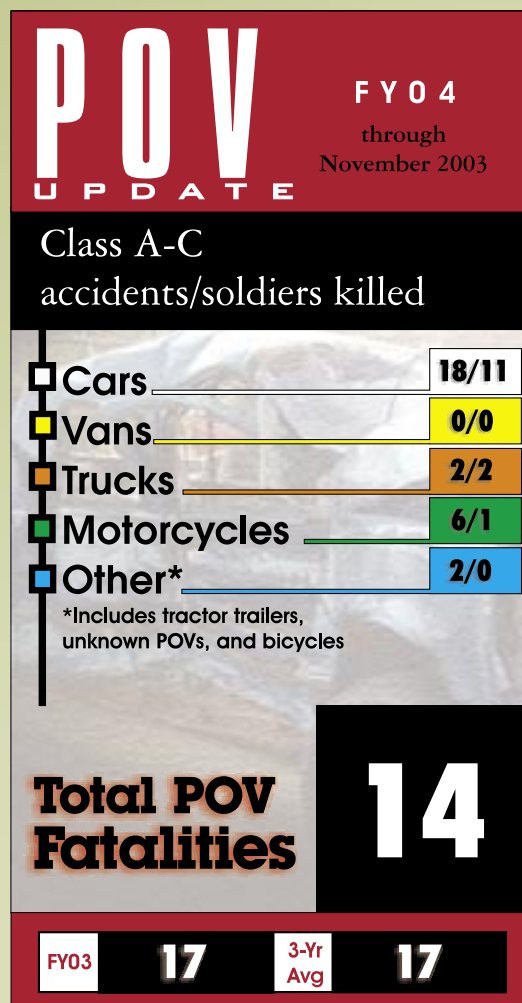
A leader should have been there when these two Soldiers arrived back at their unit. The leader should have talked with these Soldiers, found out what their plans were, and counseled them. Leaders must identify the Soldiers who fit the "high risk" profile and implement controls to mitigate the risks. Soldiers who fit the "high risk" profile:

- Are between the ages of 18 and 24;
- Are in grades E-1 through E-4;
- Are operating or riding in a vehicle between the hours of 2300 and 0400;

- Have a history of disciplinary, drug, or alcohol problems;
- Are taking medications that affect their motor skills or induce fatigue;
- Are just returning from a prolonged deployment;
- Are going on a mid-tour leave;
- Are attached to or are from another unit (including mobilized Soldiers).

When Soldiers know their leaders are genuinely concerned about them, they will listen. It's true some Soldiers will do whatever they want regardless of what they're told. However, there are just as many or more who will listen. Are you willing to take a chance and say nothing? 

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CamelBaks Need Care Too!

JULIE SHELLEY
Staff Editor



Your deployment orders have come through and you're packing for a tour in Iraq or Afghanistan. You begin checking off those essential items when, suddenly, you realize your CamelBak has been in the closet for more than a year now. Even worse, there's still a little water left from the last time you used it! What can you do now?


Every Soldier deploying to Southwest Asia, or even gearing up for an exercise at the National Training Center or Joint Readiness Training Center, hears "hydration" over and over again. From basic training on up, Soldiers are reminded constantly of the importance of staying hydrated. Many Soldiers have adopted the CamelBak system in addition to the standard canteen because of its easy portability and use. However, like any other system, the CamelBak requires maintenance to keep it safe.

First and foremost, the CamelBak must be kept clean to prohibit the growth of mold and bacteria. Wash the system daily with warm, soapy water. (Before storing the CamelBak, be sure the system is completely dry.) When the system hasn't been used for awhile, fill the reservoir with water, add 2 teaspoons of household bleach, and let it sit overnight. Thoroughly rinse the system the next morning with warm water. Also, because the CamelBak is a closed system, sports drinks and other beverages containing sugar accelerate the growth of mold and other contaminants inside the reservoir. Always rinse the system

thoroughly with warm water after each use with sports drinks.

The fluctuating temperatures in the desert won't make much of a difference to your CamelBak. Cleaning is the same in both hot and cold environments. However, the water inside the CamelBak will reach the ambient, or outside, temperature in just a few hours. To delay freezing, keep the system close to your body under insulated layers. When the temperature gets hot, store the full reservoir overnight in a refrigerator to keep the water cool and inhibit bacterial growth.

CamelBak systems are designed to last and should see you through your deployment, even if it lasts a year or longer. With proper cleaning and storage, the reservoir will last many years. Bite valves typically wear out in 3 to 4 years, depending on how frequently you use them. And, when you do make it home, be sure to store your CamelBak in a dark, cool place for your next adventure.

Author's note: The CamelBak system is not safe for use in a nuclear, biological, chemical (NBC) environment. In an NBC threat, the standard 1- and 2-quart canteens should be used. 

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ACV

Class A

■ Soldier died from electrical shock after grabbing some low-hanging power lines. The Soldier's BFV crossed under the power lines just prior to the accident.

Class B (Damage)

■ BFV suffered Class B damage when its track broke, causing the vehicle to pull to the left side, cross over a guardrail, and overturn. The vehicle was traveling between 20 and 30 KPH when the track broke.



AMV

Class A

■ Soldier drowned when the HMMWV he was riding in drove into a canal and was swept away. The HMMWV's driver and another Soldier escaped from the vehicle. The Soldiers were searching an area after a mortar attack at the time of the accident.

■ Soldier died when the split ring HEMMT tire he was changing exploded. The split ring struck the Soldier in the head, causing fatal injuries. Two other Soldiers were injured in the accident.



Personnel Injury

Class A

■ Soldier died from wounds suffered during a friendly fire incident. No other details were reported.

■ Soldier drowned in a canal after he tried to rescue another Soldier whose vehicle entered the canal.

■ Soldier suffered fatal injuries after being hit by a forklift's tines during upload operations.

■ Soldier died from injuries suffered as the result of a non-combat weapons discharge. No other details were provided.

■ Soldier collapsed and died after finishing the walking portion of the APFT.

Class B

■ Soldier's finger was amputated at the knuckle while he was attempting to hook up a 600 GPM pump trailer to a HMMWV. The Soldier's finger was caught when the HMMWV's driver moved the vehicle forward, resulting in the amputation.

■ Soldier lost the tip of his middle finger when a CONEX door slammed on his hand. A gust of wind caused the door to hit the Soldier's hand.

■ Soldier's finger was amputated when his wedding ring caught on a metal shackle on an obstacle course. The Soldier was negotiating the obstacle course during unit training when he attempted to slide against a wall to the ground, causing the ring to catch.

■ Soldier's finger was amputated when he jumped from the rear of an LMTV. The Soldier's finger was caught

during the jump, causing it to separate from his hand.



POV

Class A

■ Soldier died after being struck by a POV while crossing a highway. The accident occurred during the early morning hours.

■ Soldier suffered fatal injuries when his vehicle ran off the roadway. No other details were provided.

■ Soldier was killed after his motorcycle struck a sedan on a foreign highway. The sedan attempted to make a right turn in front of the Soldier, who was riding in the opposite lane. The Soldier was unable to stop his motorcycle or avoid the sedan and struck the left front of the vehicle. The Soldier, who was wearing a helmet, was thrown from the motorcycle during the accident sequence.

■ Soldier died after being struck by a pickup truck during the early morning hours. The Soldier was crossing a dimly lit, four-lane highway without a crosswalk when the pickup truck, which was speeding, hit him. The Soldier was wearing dark clothing and crossing the highway in an area just around a curve at the time of the accident.

■ Soldier suffered fatal injuries when he was hit by a pickup truck while changing a tire on his vehicle.



Driving?



Sometimes you can't predict every hazard—like the road collapsing under your vehicle. But you can **ALWAYS** take time to buckle up and wear your helmet. This driver did and walked away from the accident uninjured.



Buckle Up

Wear Your Helmet

Be Prepared